# **COD School Testing Guide**

## Introduction

The School Testing Guide is intended for all participants in the COD System. This includes both Phase-In and Full Participants.

# 1.1 Purpose

The purpose of School Testing is to provide schools, third-party servicers and software vendors an opportunity to test business processes and system software with the Common Origination and Disbursement (COD) System, prior to the transmission and processing of actual production data. This allows schools, third-party servicers and software vendors to make corrections or enhancements to software applications and processes prior to entering into the "live" production environment.

**Note:** References to the term "schools" includes schools and entities that process on behalf of schools (such as third party software vendors and third party servicers).

# 1.2 Scope

School Testing allows the opportunity to test the business processes and software applications used to support school processing under Common Origination and Disbursement prior to commencing processing in the production environment. This effort makes problem discovery and resolution simpler, faster, and less costly in a low-volume, controlled test environment. The transmission of production data will be smoother, with fewer problems and there will be a reduced risk of production problems.

COD School Testing is broken down into four distinct phases of testing. The dates for these testing phases are contained within this document. Formal signup is required through Customer Service for each testing phase.

Phase I - SAIG Communications Testing (Full Participants and Phase-In Participants)

COD works with schools to ensure that schools can transmit records and that these records can be delivered as expected. This test assists schools in the identification and resolution of communication issues before process testing begins in the upcoming phases. This testing phase is scheduled from 11/12/2001 through 12/19/2001. This testing phase is **required** for Full Participants and Phase-In Participants.

Phase II - Common Record Manual Verification (Full Participants Only) COD works with schools to ensure that the XML format is received as expected and assists schools in the identification of potential updates to their Common Record submissions. Phase II testing assists in the preparation of the upcoming Phase III and Phase IV testing for 2002-2003. This testing phase is scheduled from 01/07/2002 through 02/28/2002. This testing is optional for Full Participants, and a formal signup prior to testing is required through Customer Service.

Phase III – Structured Application Testing (Full Participants and Phase-In Participants)

COD works with schools using structured test cases to ensure that the systems are functioning as expected and assists schools in the identification of potential updates to their system before beginning actual processing for 2002-2003. This testing phase is scheduled from 03/04/2002 through 04/19/2002 for Window A and from 05/06/2002 through 05/17/2002 for Window B. This testing is optional, and a formal signup prior to testing is required through Customer Service.

During Phase IV – Application Testing (Full Participants and Phase-In Participants)

COD works with schools using structured test cases to ensure that the systems are functioning as expected. In addition, Full Participant schools can request an additional 13 students to test with in which schools can create their own test cases and expected results as well as test COD web functionality. This testing phase is scheduled from 06/03/2002 through 09/30/2002. This testing is optional, and a formal signup prior to testing is required through Customer Service.

All Schools can choose to test. Schools new to the Direct Loan Program must complete School testing with COD before they move into production.

Full Participant Schools are not required to test with COD, but are encouraged to participate in this testing. Full Participant Schools should refer to the *Full Participant School Test Case Guide* for more information. This guide contains a description of the test data sent to and from the schools to COD, with test execution guidelines and structured test cases with multiple testing cycles.

Phase-In Schools are not required to test with COD but are encouraged to participate in this testing. Phase-In Schools should refer to the *Phase-In School Test Case Guide* for more information. This guide contains a description of the test data sent to and from the schools to COD, with test execution guidelines and structured test cases with multiple testing cycles.

Schools that use a third-party servicer do not need to test with COD. Instead, the third-party servicer can complete the test on behalf of their customers.

#### 1.3 Guidelines

## 1.3.1 School Testing Phases

School Testing is conducted in four separate and distinct phases.

**Phase I** – SAIG Communications Testing

Phase II - Common Record Manual Verification

Phase III - Structured Application Testing

**Phase IV** – Application Testing

## 1.3.2 Test Entry Criteria

In order to begin testing with COD, schools needed to have completed the following steps:

Completed a COD School Testing signup document located in Appendix TB for the corresponding test phase and submitted it to Customer Service no later than the assigned deadline for each phase. **Note:** A separate sign up document must be complete for each test phase in which a school wants to participate. For schools convenience only one signup document is required for Phase III and Phase IV when the appropriate Phase fields are checked.

- Established individual testing date(s) specific for your school(s) with Customer Service by contacting Customer Service.
- Received a testing Common School Code to be used just for testing purposes from Customer Service.

**Note:** A new test Common School Code is assigned for testing for Full Participants only. Vendors will be testing COD School Codes for testing purposes.

- Received call from Customer Service or the COD School Test Team confirming test plans and COD readiness.
- Installed the latest version of the message class table from SAIG.
- Installed and implemented the 2002-2003 updates to the software applications.
- Developed a means of keeping testing data segregated from production environment.
- Identified individuals at the school responsible for completing the COD school testing process.
- Developed a means of forward dating schools test environment

Note: Testing within any previous phase is not a prerequisite for schools to participate in any other testing phase.

Note: CPS testing is not a prerequisite for COD School Testing.

#### 1.3.3 Test Exit Criteria

Each school determines individually when it has completed COD testing. Schools can select which processes to test and schools are able to continue testing until expected results are received and testing is considered successful. There is no pre-defined "end" of the test other than the published end dates for each COD School Testing phase. Signup concludes two weeks prior to the end of each test phase. Once the signup deadline for a testing phase has passed, schools wanting to test must signup for the next test phase.

#### Test Exit Criteria:

- Schools have been able to successfully complete the desired test scenarios by achieving the expected test results.
- COD Customer Service contacts school with test results.
- Testing phase window closes prior to test completion by school

# **Testing Schedule and Descriptions**

### 2.1 SAIG Communications Testing - Phase I

COD Full Participant and Phase-In Participants were required to participate in this testing phase. SAIG Communications Testing – Phase I took place November 12, 2001 through December 19, 2001. The purpose of the SAIG Communications Testing was to ensure that all schools could transmit records to COD using SAIG. This testing did not validate the data or the file format submitted.

**Note:** Phase I tested the ability for all schools to execute the file transfer process using SAIG.

#### 2.2 Common Record Manual Verification - Phase II

Full Participants only are eligible to participate in this testing phase. Common Record Manual Verification – Phase II takes place January 07, 2002 through September 30, 2002. The purpose of the Common Record Manual Verification – Phase II is to ensure that Full Participant Schools can send COD a Common Record and that the Common Record is in the correct XML format. This testing does not validate the data submitted within the Common Record. For this phase of testing, only two student records should be sent in the Common Record.

## 2.3 Structured Application Testing – Phase III

COD Full Participant and Phase-In Participants are eligible to participate in this testing phase. Structured Application Testing – Phase III takes place March 4, 2002 through April 19, 2002 for Window A and May 6, 2002 through May 17, 2002 for Window B. The purpose of the Structured Application Testing is to ensure that schools can send, receive, and process batches of records using detailed input instructions with detailed expected results issued by COD. Schools use a test ISIR file supplied by

COD that creates a test data set of students to use with the structured test cases.

Full Participants receive Common Record Receipts and Response files and need to verify that these records can be processed correctly.

Phase-In Participants receive Acknowledgements in fixed-length file format and need to verify that these files can be processed correctly. (During the COD process, Common Record Response files are translated to fix-length Acknowledgement files for Phase-In Participants only.)

#### 2.4 Application Testing – Phase IV

COD Full Participant and Phase-In Schools are eligible to participate in this testing phase. Application Testing – Phase IV takes place from June 3, 2002 through September 30, 2002. Phase IV allows schools to test after COD Release 1.1 has been migrated to production and allows schools to test COD web functionality.

The purpose of the continued Application Process Testing is to ensure schools can send, receive, and process batches of records using detailed input instructions with detailed expected results provided by COD. Schools that elect to participate in Application testing use a test ISIR file supplied by COD that creates a test data set of students that are used in the structured test cases. Application Testing enables both Full Participants and Phase-In Participants to use the structured test cases provided by COD.

Full Participants receive both Common Record Receipts and Response files and need to verify that these records can be processed correctly.

During the COD process, Common Record Response files are translated to fix-length Acknowledgement files for Phase-In Participants only. Phase-In Participants receive Acknowledgements in fixed-length file format and need to verify that these files can be processed correctly.

Phase IV has two additional aspects of testing for Full Participants only. Full Participants are provided the option to:

 Utilize additional test students to be used in unique test cases and expected results created by their school.  Test with COD via the web. Web Application Testing is discussed in the next section.

## 2.5 Web Application Testing – Phase IV (Continued)

Only Full Participant Schools have the ability to participate in Web Application Testing that is part of Phase IV.

Web Application Testing takes place from June 3, 2002 through September 30, 2002. The purpose of the Web Application Testing is to ensure Full Participants can utilize COD web functionality prior to production.

Schools should contact Customer Service for the web URL link to the COD School Test website and to receive the appropriate User IDs and passwords.

# **Customer Service**

Register for testing by contacting Customer Service and completing the signup document. This signup document needs to be completed for each test phase in which a school desires to participate and must be received no later than the signup deadline.

**Note:** The last possible date to sign up is May 3, 2002 for Phase III and September 10, 2002 for Phase IV.

Once a school has signed up for a testing phase, a Customer Service Representative (CSR) contacts the school by telephone to obtain school-specific information and to schedule specific test dates for the school. The CSR also provides additional information such as the testing Common School Code to be used by the school for this phase of testing.

**Note:** Full Participant schools are assigned a unique testing Common School Code for testing in which the school is participating.

Customer Service can be contacted by dialing 1-800-433-7327 or by email at the following address <u>sfa.customer.support@ed.gov</u>.

#### 3.1 Contact Names

Each school participating in testing notifies Customer Service of their designated contact person on the testing sign-up document. The contact person should be consistent for the period of time before, during, and upon completion of the test. The testing process likely involves a technical resource within the financial aid office. This person should be a technically oriented staff member who is very knowledgeable about the school's financial aid system. This person should be available to assist in problem analysis and to coordinate any follow-up tests that may be required. If a school uses a Third Party servicer and the servicer is conducting the test on behalf of the school, COD needs the name and telephone number of a servicer contact person.

#### 3.2 Scheduling

Appendix TB of this guide contains the School Testing Sign-up Document that needs to completed and emailed to Customer Service by the appropriate deadlines shown below:

<b>Testing Phase</b>	Testing Phase Description	Deadline	Who can
			<b>Participate</b>
Phase I	SAIG Communication Testing	12/19/2001	All
Phase II	Common Record Manual	09/20/2002	Full-Participants
	Verification Testing		
Phase III	Structured Application Testing	04/08/2002	All
	Window A		
	Structured Application Testing	05/03/2002	All
	Window B		
Phase IV	Application Testing	09/10/2002	All
	Web Application Testing	09/10/2002	Full-Participants

When a school completes the School Testing Sign-up Document, the school is contacted by Customer Service to schedule testing dates within each phase of testing.

#### 3.3 Support Services

While a school is going through the testing, there are many support sources available for assistance, as listed below:

School Support Services			
Support Service	For Information on the Following:	Contact	
School Testing Sign-Up	Registering for School Testing.	Contact COD Customer Service	
ISIR Data Issues	Problems with ISIR data only.	Contact CPS/WAN Customer	
		Service	
SAIG	Issues concerning connectivity to	Contact CPS/WAN Customer	
	SAIG only.	Service	
COD	Issues concerning all items related to	Contact COD Customer Service	
	Pell and DL processing only.		
School Testing Issues	Issues concerning all items related to	Contact COD Customer Service	
	COD School Testing only.		
School Testing Results	To obtain or report School Testing	Contact COD Customer Service	
	results for COD School Structured		
	Testing only.		

## **Test Data**

The Test data section explains test data requirements for Phases III and Phase IV.

## 4.1 Full Participant (CR) Test Data

Full Participants are those schools who will begin processing in the 2002-2003 award year using the Common Record in XML format. Schools that have elected to participate in this manner test using the new Common Record format as published by the Department of Education in the COD Technical Reference.

COD provides actual CPS test data via an ISIR file to each participating school. Each school processes the ISIR data that COD provides and generates student award transactions using its normal awarding process. Schools are required to send this file to COD using the normal SAIG processing protocols with the exception of the school testing message classes and the COD school testing destination mailbox (TG75891). Upon

submission of each test file, a school receives a "Receipt" file confirming that the file has been received by COD and is in a readable XML format. Once the data has been processed, schools receive a Response file indicating the results of each record submitted. If a record rejects, the Response record indicates which data element(s) have rejected. Rejected records can then be corrected and resubmitted.

The anticipated time from record submission to receipt of a Response file is less than two business days for the purposes of testing and may be earlier depending on the timing of the input test file received.

#### 4.2 Phase-In Participant Test Data

Phase-In Participants continue to use flat fix-length files to submit data and to receive responses from COD. The record layouts to be used by Phase-In Participants for 2002-2003 are in the 2002-2003 RFMS Technical Reference and the 2002-2003 Direct Loan Technical Reference. For these schools, there should be no significant change in business processes other than a few minor adjustments to the 2002-2003 record formats.

Each school processes the COD provided ISIR data and generates origination and disbursement transactions using its normal process. Schools submit their test files to COD using the normal SAIG processing protocols with the exception of using the specified Phase-In School Testing message classes and using the specified COD School Testing mailbox destination (TG75891).

Once COD has processed the data for the school, a Response file is generated and translated to the appropriate fix-length Acknowledgement file. The Acknowledgement is sent back indicating the results of each record submitted. If a record rejects, the Acknowledgement provides a reject reason. If the expected results were not intended to be a rejected record, schools can correct and resubmit these previously rejected records.

The anticipated time from record submission to receipt of an Acknowledgement file is less than two business days for the purposes of testing and may be earlier depending on the timing of the input test file received.

# Message Classes

#### 5.1 Full Participant Schools

Common Record message classes are not year specific and are to be used from year to year. However, different test message classes must be used for testing.

#### 5.11 Testing Phase Message Classes

During the testing for Phase II, schools use the following message classes when sending in Common Records for testing.

From school to COD: RPTESTIN

When COD processes the file, a Response file is generated under the following message class:

From COD to school: RPTESTOP

During the testing for Phases III and IV, schools use the following message classes when sending in Common Records for testing.

From school to COD: CRTESTIN

When COD processes the file, a Response file is generated under the following message class:

From COD to school: CRTESTOP

#### 5.2 Phase-In Schools

Legacy message classes continue to be year specific. However, different test message classes must be used for testing.

# 5.2.1 Testing Phase

Phase-In Schools send in records according to the fixed-length formats published in the 2002-2003 RFMS Technical Reference and the 2002-2003 Direct Loan Technical Reference. Test message classes for these record layouts include:

# 5.2.1.1 Direct Loan Test Message Classes for Phase-In Participants

Direct Loan Test Message Classes		
Origination		
Full Subsidized/Unsubsidized Loan Origination Record	DTSF03IN	
Full Loan Origination Acknowledgement	DTOD03OP	
Change		
Origination Change Record	DTSC03IN	
Origination Change Acknowledgement	DTOC03OP	
Disbursement		
Disbursement Record:	DTSD03IN	
Actual Disbursements		
Adjustments to actual disbursement amounts		
Adjustments to actual disbursement dates		
Disbursement Acknowledgement	DTOD03OP	
Booking Notification	DTOD03OP	

#### 5.2.1.2 RFMS Test Message Classes

RFMS Test Message Classes		
Origination Records	PTOA03IN	
Origination Acknowledgement	PTOA03OP	
Disbursement Records	PTDR03IN	
Disbursement Acknowledgement	PTDA03OP	

#### 5.2.2 Production Phase

In order to begin the production phase, all test data must be removed from the participating systems. Schools should ensure that files are sent using the proper production message classes and production destination.

# Resource Planning

#### 6.1 Hardware/Software

Schools should have all hardware and software capabilities ready before testing. Each school should have all upgrades installed from vendors or regulatory releases for 2002-2003.

## 6.2 Roles and Responsibilities

#### 6.2.1 Schools, Vendors, and Third Party Servicers

Schools are responsible for completing the following steps associated with COD School testing:

- Review all COD School Testing documentation posted on the IFAP web site
- Review the COD Implementation Guide in the COD Technical Reference

- Review all documentation that is emailed to the participating school (if applicable)
- Schedule testing dates with Customer Service using the signup document via email
- Prepare a test environment for COD School Testing that uses the test destination mailbox, test message classes and the test common school identifier
- Ensure test environment allows forward dating capabilities
- Prepare test data to execute the Structured COD School Testing scripts for submissions
- Receive a technical readiness call from Customer Service after scheduling testing dates for each testing phase
- Send the test data to COD via the SAIG
- Retrieve receipts and responses from COD via the SAIG (Full Participants)
- Retrieve acknowledgements from COD via the SAIG (Phase-In Participants)
- Process submitted receipts (Full Participating Schools)
- Process responses/acknowledgements
- Remove all data used for testing when completed from the school's and/or vendor's environment

**Note:** Do not use real student data or production data during any phase of testing. Utilize the student data provided in the ISIR provided by COD.

#### 6.2.2 COD

COD provides the following support during testing:

- Conduct technical readiness calls with Schools
- Provide schools/vendors with their own Testing COD School Code to use only during a specific testing phase
- Process submitted data
- Send receipts and responses (for Full Participates) via the SAIG
- Send acknowledgements (for Phase-In Participates) via the SAIG

- Update schools/vendors of their testing status
- Assist with issue identification and resolution
- Provide testing technical guidance

# **Testing Schedule**

#### **SAIG Communications Testing - Phase I**

Testing Dates: November 12, 2001 – December 19, 2001

Last day for test signup: December 19, 2001

#### Common Record Manual Verification - Phase II

Testing Dates: January 07, 2002 – September 30, 2002

Last day for test signup: September 20, 2002

## **Structured Application Testing - Phase III**

Window A:

Testing Dates: March 04, 2002 – April 19, 2002

Last day for test signup: April 08, 2002

Window B:

Testing Dates: May 06, 2002 – May 17, 2002

Last day for test signup: May 03, 2002

## **Application Testing - Phase IV**

Testing Dates: June 03, 2002 – September 30, 2002

Last day for test signup: September 10, 2002

## Application Testing (Web) - Phase IV

Testing Dates: June 03, 2002 – September 30, 2002

Last day for test signup: September 10, 2002

# **Appendix TA - Acronyms**

Acronyms		
AY	Award Year	
COD	Common Origination and Disbursement	
CBS	Campus-based System	
CPS	Central Processing System	
CSR	Customer Service Representative	
DLOS	Direct Loan Origination System	
DLSS	Direct Loan Servicing System	
EAI	Enterprise Application Integration	
FAFSA	Free Application for Federal Student Aid	
FFEL	Federal Family Education Loan	
FFELP	Federal Family Education Loan PLUS	
FISAP	Fiscal Operations Report and Application to Participate in	
	Campus-Based Programs	
GAPS	General Account Payment System	
GUI	Graphical User Interface	
ISIR	Institutional Student Information Record	
NSLDS	National Student Loan Data System	
PEPS	Postsecondary Education Participation System	
RFMS	Recipient Financial Management System	
SAR	Student Aid Report	
FSA/FMS	Office of Federal Student Aid/Financial Management System	
SME	Subject Matter Expert	
TMM	Total Methodology Maintenance	
VDC	Virtual Data Center	

# Appendix TB: COD School Testing Sign Up Document

COD School Testing Phases III & IV - Testing Signup

Please complete and send to <a href="mailto:sfa.customer.support@ed.gov">sfa.customer.support@ed.gov</a>

Deadlines for signup: 04/08/2002 for Phase III - Window A 05/03/2002 for Phase III - Window B 09/10/2002 for Phase IV 09/10/2002 for Phase IV - Web

Desired Test Phase(s):	( ) Phase IIIa ( ) Phase IIIb ( ) Phase IV ( ) Phase IV-Web
Organization:	
Campus (if applicable):	
COD School Code:	
Mainframe:	( ) Yes or No ( )
Communication Software:	EDConnect ( ) Easy Access ( ) Other
Vendor /Product Used (if applicable):	
OPE ID #:	

Aid Programs:	(Check all applicable for your test) ( ) Pell ( ) Direct Loan ( ) Campus-Based
Organization Type:	(Check all applicable) ( ) School ( ) Vendor ( ) Servicer
Testing TG Mailbox#:	
Contact Person (Last, First):	
Contact Phone Number:	
Contact Email Address:	